



CPT Monica Sneed, Commander of Alpha Detachment, 126th Finance and Accounting Co., places a transaction into her computer at Bagram Airfield in support of *Operation Enduring Freedom*.

5. NETCOM is final approval authority for Category 3 purchases.

6. ITEC4 releases orders requiring customer funding once they have processed the order.
7. Softmart provides License Certificate Numbers via e-mail to the requester.

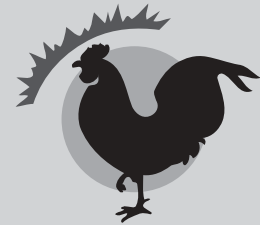
ASCP has posted information regarding the MS ELA to include a list of frequently asked questions on its Web site. Additional information is available on the AKO Knowledge Collaboration Center under Army CIO/G-6, NETCOM/9th Army Signal Corps, Enterprise Systems Technology Activity and ELA folder. A complete listing of all DOD ESI Agreements mandated by the

*Defense Federal Acquisition Regulation Supplement (DFARS) Part 208* is provided on the DOD ESI Web site at <http://www.don-imit.navy.mil/esi/> and is definitely worth a visit. ASCP is the Army's appointed Software Product Manager for DOD ESI agreements.

CYNTHIA K. DIXON is an Information Management Specialist, CIO/G6. She holds a B.S. in computer information systems from Grambling State University and an M.S. in information systems from the University of Mary Hardin-Baylor.

## What Can the Rooster Do for You?

Jaxon Teck



**If your program hasn't already reached Milestone C, valuable logistics information required for decision making and useful ideas for a better product are now available.**

**But what do you ask for, so early in a program?**

People may snicker when telling you there are only two phases to logistics analysis during acquisition — Phase I, it's too early to tell. Logistics analysis must wait until there is a design. Phase II, alas, it's now too late to change. The design is too far along to change economically.

If this scenario seems all too true, don't despair — help is on the way. Early logistics analyses are now deliberately funded by Milestone B (yes, Bravo) to reduce life-cycle costs.

In addition, some logistics issues require analysis *before* engaging in traditional efforts that improve maintainability and before optimizing support for a given design. You want a

range of estimated total costs for maintenance and supply to determine the affordability of the product. You also want to know which specific aspects will greatly reduce costs if given more design attention. Well, the Rooster knows!

### RoosterLOG™ — The Early Voice of Logistics™

RoosterLOG logistics services from the Logistics Research and Engineering Directorate (LRED) at Picatinny Arsenal, NJ, achieved some innovative results. The following three examples show how to tackle early logistics analysis for make-or-buy decisions, competing architectures, design choices and even contractor-off-the-shelf alternatives,

perhaps with packaging improvements. Early logistics analysis is also useful for choices between competing companies or even between countries with similar equipment.

### XM29 Rifle Logistics Cost Savings

XM29 Rifle support costs were cut in half before there was a design. At the beginning of the XM29 Rifle program, there were five different architectures for the integrated airburst weapon system including decisions concerning barrel design/configuration and fire control integrated into a single-shell housing (with lowest weight). This is how logistics analysis supported the architecture decision, before there was a design. Using innovative tactics, the log team:

- Changed the search for an exact number pertaining to a specific design,



The Joint Lightweight 155mm howitzer system is designed for 21st century contingency operations. It provides 24-hour, all-weather fire support using the entire 155mm family of munitions including the new Excalibur global positioning system guided projectiles and the MACS in support of Army and Marine maneuver forces.

“How much will this cost?” to a less exact estimate, “Can we afford this?”

- Performed standard level-of-repair analyses to show relative cost comparisons between proposed architectures.
- Focused on the differences between architectures to determine cost-effectiveness.
- Gathered consensus guesses when there were no test data for the new system.
- Used ranges of likely reliabilities when estimates were unreliable.
- Leveraged decision-maker attention by showing that current systems may cost more than realized.
- Used a bar chart to compare the new weapon to current systems.

From the analyses, the log team’s lessons learned determined that:

- It’s not “too early to tell, then too late to change.” The most-liked XM29 Rifle architecture (least weight) was dropped partly because its sustainment costs were nearly twice that of the next best choice and, therefore, not affordable.



XM29 Integrated Airburst Weapon

- The design influence for supportability and logistics was in the contract and started right away. The loaded

database is very useful for different purposes. (Suggest a DOD-approved software package such as the Logistics Support Activity’s Computerized Optimization Model for Predicting and Analyzing Support Structures — more commonly known as LOGSA’s COMPASS.)

Ask for our PowerPoint briefing that shows how cost-saving analyses were presented for program management decision making. There is also a 1-page paper showing additional tactics and more lessons learned.

### ‘Kick-Butt’ Logistics

Kick-butt logistics improves combat power. You can develop striking power when more equipment is ready and working. In addition, you can plan for staying power when equipment



It's important to highlight logistics and supportability risks early to help build combat power. The actual risk assessment process used is available in a 2-page paper with a Microsoft® PowerPoint briefing. The paper includes step-by-step instructions. The briefing illustrates examples of common logistics risks and potential outcomes. However, only the highest risks are highlighted for top-level action.

### Leveraging Product Value

Product value was leveraged with innovative packaging. Packaging played an early role in the acquisition of the new Modular Artillery Charge System (MACS) for the 155mm howitzer. The Army is phasing out traditional "multibag" charges — used since the 1800s — from its 155mm artillery and replacing it with Picatinny-developed rigid-case,

modular propellant charges, each about the size of a large coffee can.

With the MACS, cannoneers in the field do not have to cut away excess powder bags to fire the correct distance. Therefore, burning or disposing of toxic excess powder is a thing of the past. Instead, cannoneers build the charge by selecting the right number of modular charges. MACS packaging enables several benefits in addition to the basic modular design:

- The charges are loaded twice as fast as the previous bag charges.
- The internal extraction sleeve is used to load charges into the gun.

survives high operations tempo and keeps working. Kick-butt logistics leveraged leader attention early enough to make a difference. At a program review after Milestone B, the prime contractor highlighted current program risks. Briefing charts showed *cost* risks, *schedule* risks and *performance* risks. When the briefing was completed and open for questions, the program manager asked, "Where is the supportability column?" After the meeting, the contractor asked the Supportability Integrated Product Team to add logistics risk assessment to the traditional categories. Using innovative tactics, the log team:

- Defeated habits of mind with repetition. Whenever the Integrated Logistics Support Manager was at a meeting where the phrase, "cost, schedule and performance" was mentioned, he added "and supportability."
- Added logistics as an equal, separate category on the risk assessment chart used for briefings. This is

done even in the absence of logistics risks. Remember, habits of mind.

- Brought logistics risks to leader attention early, even before the program was ready for another formal risk assessment. Waiting only makes resolution harder.

From these analyses the log team's lessons learned determined:

- It's never too early to identify specific risks to the program when solutions are possible and cheapest.
- Sometimes a risk is obvious to the team, but still needs a clear explanation for others. Test the explanation and potential consequences before going public.

Kick-butt logistics improves combat power. You can develop striking power when more equipment is ready and working. In addition, you can plan for staying power when equipment survives high operations tempo and keeps working.



- Charge separators and container blow-out panels reduce the effects of unintended ignition.

MACS cost savings are:

- Storage and transportation requirements decrease up to 42 percent because all the modular charges are used.
- Every MACS container is opened without tools, and each has an extraction sleeve that doubles as a handling device, eliminating the need for special tools.
- Every container has separators between the charges that double as an extraction tool to lift charges out of a hot tube, without requiring special tools for extraction.
- Unit trainers can safely teach the MACS because it is easy to use and easy to train.

- The external containers can be recycled several times.

From the analyses, the log team's lessons learned resulted in:

- Early packaging design and engineering that enhanced performance.
- A better product, fielded faster and cheaper without changing basic performance.

The MACS training video shows how the improved packaging advances product performance. Ask for a copy of the 28-minute video at [MACSmail@pica.army.mil](mailto:MACSmail@pica.army.mil).

So what can The Rooster do for you? The examples described above are just a few of the innovative solutions developed by RoosterLOG logistics services. More information is available by

contacting LRED at [RoosterLOG@pica.army.mil](mailto:RoosterLOG@pica.army.mil). LRED supplies individuals or teams to support specific DOD efforts. Those solution specialists involve the whole directorate for useful input. Teams and individuals also consult with product developers in all services to suggest an array of possible innovations. Ask about our Flash Consulting Service for a low-cost, quick look.

**JAXON TECK** (USAR, Ret.) is a Logistics Management Specialist in LRED, matrix with the XM29-XM8 Rifle program. He earned a B.S. from Cornell University and an M.B.A. from New York University. He is Level III certified in life cycle logistics/acquisition logistics.

## Logistics — Back to Basics, but With More Speed and Precision

CSM Tyler Walker II



**You don't have to go halfway around the world to a combat zone to appreciate logistics. You can just go home to recognize that the basics we all expect and need — food, clothing and shelter — really matter. They mean survival. Disasters, such as floods, fires and earthquakes, really shed a spotlight on basics, regardless of whom or where they strike. In September 2003, as Hurricane Isabel approached the Nation's capital, the behavior of thousands of people could be tracked as they went to grocery stores to gather food and then battened down their homes and businesses to ensure they would be sheltered from the turbulent effects of wind and rain. A month later, as the Santa Ana winds swept a firestorm across much of Southern California, people sought shelter in stadiums and local schools while firefighters from across the state battled to save the land and their homes.**